IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

GREEN et al. Atty. Ref.: 850-15

Serial No. 09/621,464 Group: 2682

Filed: 21 July 2000 Examiner: Vo, N.

For: SATELLITE BROADCAST RECEIVING AND DISTRIBUTION SYSTEM

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Assistant Commissioner for Patents
Washington, DC 20231

Sir:

EXPERT DECLARATION OF RANDY BELL

1. I have been retained by Nixon & Vanderhye PC to give an expert opinion in connection with the patent matter identified above. Specifically, I have been asked to give an opinion as to whether the patent specification (including the drawings) attached as Exhibit A (which I understand was filed on February 22, 1995) would have conveyed, as a whole at the time it was filed, with reasonable clarity to someone ordinarily skilled in the art, that the exemplary converters disclosed in the "Description of the Preferred Embodiments" section of that document are block converters that convert blocks of multiple received satellite channels.

2. Although I would have worded the Exhibit A specification differently had I written it myself, it is my opinion that this specification does provide adequate such

description and would have conveyed, to an artisan ordinarily skilled in the art, that the disclosed exemplary converters are each block converters that convert blocks of multiple channels received from a satellite.

3. Figure 1 of Exhibit A shows an item 2 that is described in the "Description of the Preferred Embodiments" section on page 8 of the specification as "a low-noise block converter (LNB)". Low noise block converters were well-known in the 1995 time frame in connection with satellite receiving and distribution systems as devices that process and output blocks of multiple received satellite channels.

4. Figure 1 of Exhibit A shows low-noise block converter 2 as outputting to converters 5 and 7 over lines 3 and 4, respectively. See Figure 1 and page 8, lines 14-23 of the "Description of the Preferred Embodiments" section. It is therefore clear that disclosed exemplary converters 5 and 7 each receive a block of multiple received satellite channels from the low-noise block converter 2.

5. Although the Exhibit A specification does not use the specific wording "block converter" or "channel block" in connection with exemplary converters 5 and 7, the "Description of The Preferred Embodiments" section of the Exhibit A specification describes these converters as "frequency converters [which] convert the entered frequencies to frequencies which the present day amplifiers can transport." See page 9, lines 3-5. In this context, the "entered frequencies" are the blocks of multiple channels outputted by the low-noise block converter 2 to the converters 5, 7. Furthermore, the "Description of the Preferred Embodiments" section does not say that converters 5, 7 select particular channels from the low-noise block converter output for application to

cable 13. Therefore, it would have been clear to someone of ordinary skill in the art from reading the Exhibit A specification as a whole that disclosed exemplary converters 5-8 are block converters that convert blocks of multiple received channels for application to cable 13.

6. It would also have been apparent to someone skilled in the art that disclosed exemplary "head-out" converters 22-24, 35-37 are block converters that convert blocks of multiple received channels the cable 13 is carrying. Once again, although the Exhibit A specification does not use the specific wording "block converter" or "channel block" in connection with exemplary converters 22-24 & 35-37, the "Description of The Preferred Embodiments" section of Exhibit A states that converters 22-24 and 35-37 further frequency-convert the signals from cable 13 in a "reverse process of the head-in processor 44" in order to "reconvert the signals to the frequencies that are utilized by the source." See page 11, lines 20 - page 12, line 1 (note that the specification refers to television sets 29, 43 as "sources" -- see page 8, lines 10-13). Since exemplary converters 22-24, 35-37 are performing a "reverse process" to the one performed by exemplary "head-in" processor converters 5-8, the skilled artisan would have understood that the "head-out" converters 22-24, 35-27 are also block converters.

7. Furthermore, from Exhibit A, it would be readily apparent to someone skilled in the art that exemplary converters 22-24, 35-37 output blocks of multiple channels to the disclosed satellite receivers 27, 41, respectively. Someone skilled in the art would understand the disclosed "satellite receivers" 27, 41 as commonly used conventional satellite television receivers that "channelize" the frequency block output of a satellite

dish and select particular channels to apply to a television set or the like. For at least this additional reason, Exhibit A as a whole would have conveyed with reasonable clarity to someone skilled in the art that exemplary converters 22-24 and 35-37 convert blocks of multiple channels received from a satellite.

8. I have sufficient experience and knowledge to render the expert opinion contained in this declaration. I have worked as an RF design engineer for nearly 25 years, and since 1977 have worked on numerous RF systems including microwave, satellite-based and satellite television systems. I am therefore familiar with the level of ordinary skill with respect to the art(s) of satellite television reception and distribution and related arts in the early 1995 time frame. I earned Bachelors and Master Degrees in Electrical Engineer from the University of Florida in the mid and late 1970's. After graduating from college, I worked as an RF design engineer for various companies from 1977 - 1985 where I designed various types of radio equipment including satellite receivers and cable television distribution equipment. From 1985 to the present, through my consulting company called Gigacom, Inc., I have worked as a consulting engineer designing microwave, communications, radar, and other equipment for a number of different companies and through my work have come in contact with numerous people skilled in the art. See my attached resume for more details concerning my experience and credentials.

8. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the

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like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Dated June 26, 2001

Randy Bell
President, Gigacom, Inc.